COMPUTER TERMINAL CORPORATION

PRODUCT SPECIFICATION

8/14/72

CENTRONICS PRINTER INTERFACE KIT 2200-242

1.0 GENERAL DESCRIPTION

The Datapoint 2200-242 Centronics Printer Interface Kit is designed to interface the Datapoint 2200 to the Centronics 101/101A Printer.

2.0 SYSTEM REQUIREMENTS

The 2200-242 requires two cables for operation. One is the standard I/O cable (2200-160) which connects the Centronics interface to the 2200. The other (Centronics Interface Cable 2200-243) connects the Centronics Interface to the Centronics printer. Power and I/O bus connections are made through the standard I/O cable. The Centronics Interface Cable carries the logic level signals which control the Centronics Printer.

The Centronics printer may be a model 101 (Upper Case Characters Only) or model 101A (Upper and Lower Case). Model 101A supplied without the lower case read only memory will print upper case characters for both upper and lower case alpha ASCII codes.

3.0 TECHNICAL DESCRIPTION

The Centronics Printer Interface Adaptor is similar in design to the Parallel Interface Adaptor (2200-420). The Centronics Printer Interface is specifically configured for use only with Centronics Printers (models 101 and 101A).

Refer to Table 2.0 and a Centronics Printer Technical Manual for additional information.

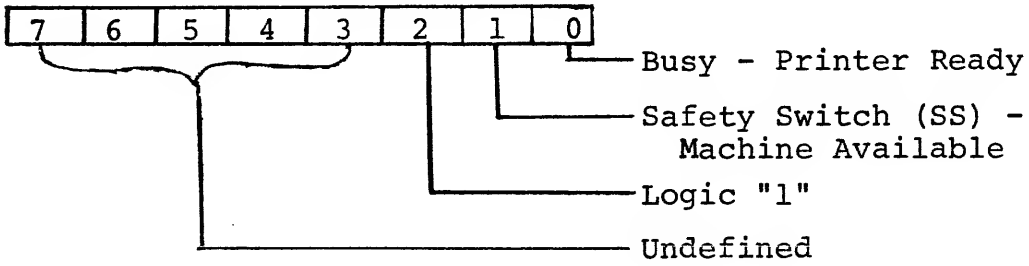
3.1 Device Address

The address of the 2200-242 as shipped from the factory is an octal 303. (It may be changed in the field to any other address. Refer to 2200-420 Product Specification for Address Modification Information.)

3.2 Status

The printer status word is defined for the three least significant bits only:

CENTRONICS PRINTER STATUS WORD



USA STANDARD CODE II
(USASCII)

Character	Code (Octal)	Binary	Character	Code (Octal)	Binary	Character	Code	Binary
Blank	040	0100000	5	065	0110101	J	112	1001010
!	041	0100001	6	066	0110110	K	113	1001011
"	042	0100010	7	067	0110111	L	114	1001100
#	043	0100011	8	070	0111000	M	115	1001101
$	044	0100100	9	071	0111001	N	116	1001110
%	045	0100101	:	072	0111010	O	117	1001111
&	046	0100110	;	073	0111011	P	120	1010000
'	047	0100111	<	074	0111100	Q	121	1010001
(	050	0101000	=	075	0111101	R	122	1010010
)	051	0101001	>	076	0111110	S	123	1010011
*	052	0101010	?	077	0111111	T	124	1010100
+	053	0101011	@	100	1000000	U	125	1010101
,	054	0101100	A	101	1000001	V	126	1010110
—	055	0101101	B	102	1000010	W	127	1010111
.	056	0101110	C	103	1000011	X	130	1011000
/	057	0101111	D	104	1000100	Y	131	1011001
Ø	060	0110000	E	105	1000101	Z	132	1011010
1	061	0110001	F	106	1000110	[	133	1011011
2	062	0110010	G	107	1000111	\	134	1011100
3	063	0110011	H	110	1001000	]	135	1011101
4	064	0110100	I	111	1001001	^	136	1011110
						←	137*	1011111

*101A ONLY

CONTROL CODES

007	BELL
012	LINE FEED
013	VERTICAL TAB
014	FORM FEED
015	CARRIAGE RETURN
016	ELONGATED CHARACTER
177	DELETE
021	SELECT ON } Model 101A only
023	SELECT OFF } Model 101A only

TABLE 2.0

Busy - Printer Ready

Busy is a logic "1" when the printer is in the correct status to receive data. When the data block is transferred, this bit goes to logic "0" until the entire line is printed and a carriage return is completed. Busy will also indicate the state of the "Select" button on the Centronics printer. When the printer is not selected, busy is held in the logic "0" state.

Safety Switch (S.S.) - Machine Available

Safety Switch is the "Hardware Alarm" status bit. During normal operation this bit is in a logic "1" state. Any printer condition which trips the printer hardware alarm will also force S.S. to a logic "0" state.

Status Bit 2

Status Bit 2 is wired to a logic "1" state at all times. This facilitates direct compatibility between existing 2200-200/201 software and the 2200-242 Centronics printer hardware. "Right Limit" status check is not necessary for the Centronics printer. An attempt to print past the right limit will initiate an automatic carriage return/line feed.

3.3 Software Characteristics

The 2200-242 Centronics interface kit provides an interface structure similar to that of the 2200-200/201 serial printer. All software designed to drive the 200/201 is directly compatible to the 2200-242 Centronics Printer Interface.

For more information refer to the Product Specification for the 2200-200/201 serial printer, sections 2.2 and 3.3.

4.0 PHYSICAL DESCRIPTION

See Figure 1

5.0 ENVIRONMENTAL REQUIREMENTS

0^{0} to 50^{0} C (32^{0} to 122^{0}F)

10^{0} to 95^{0} relative humidity

6.0 INTERFACE CONNECTIONS

See Figure 2 for pin connections and signal names.

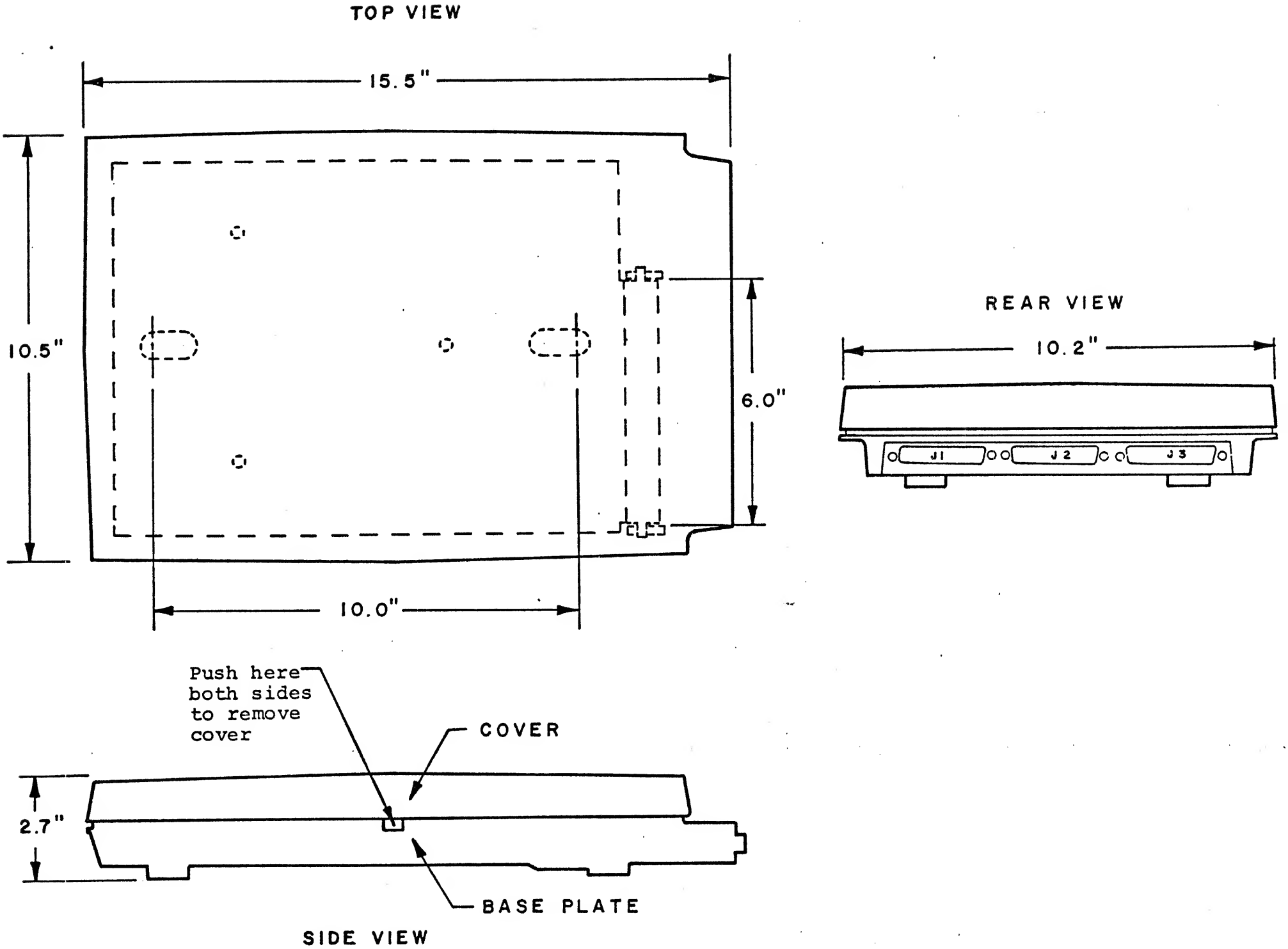
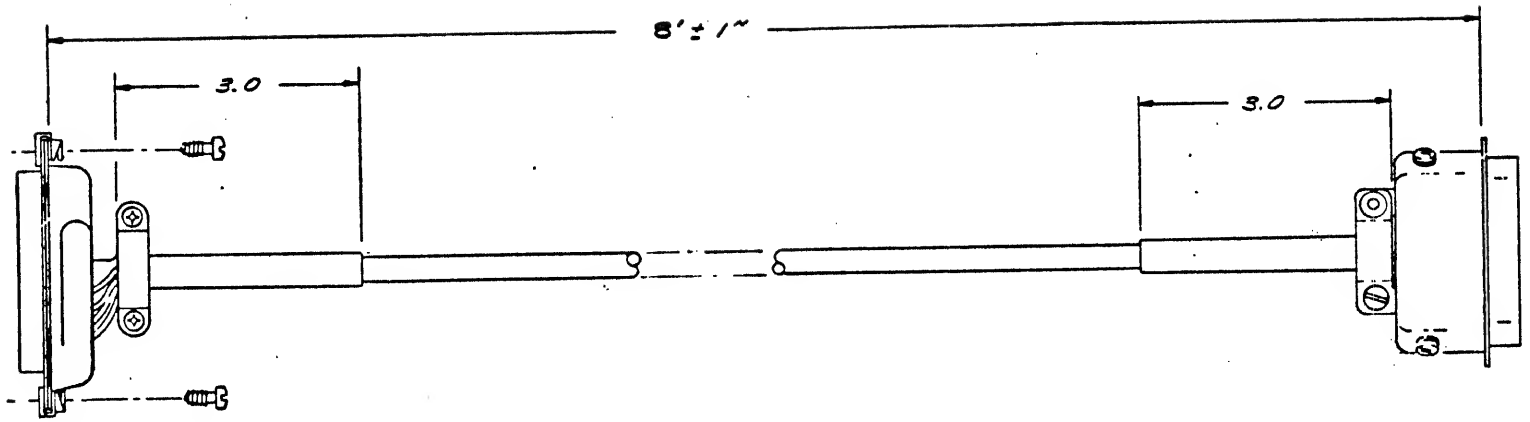
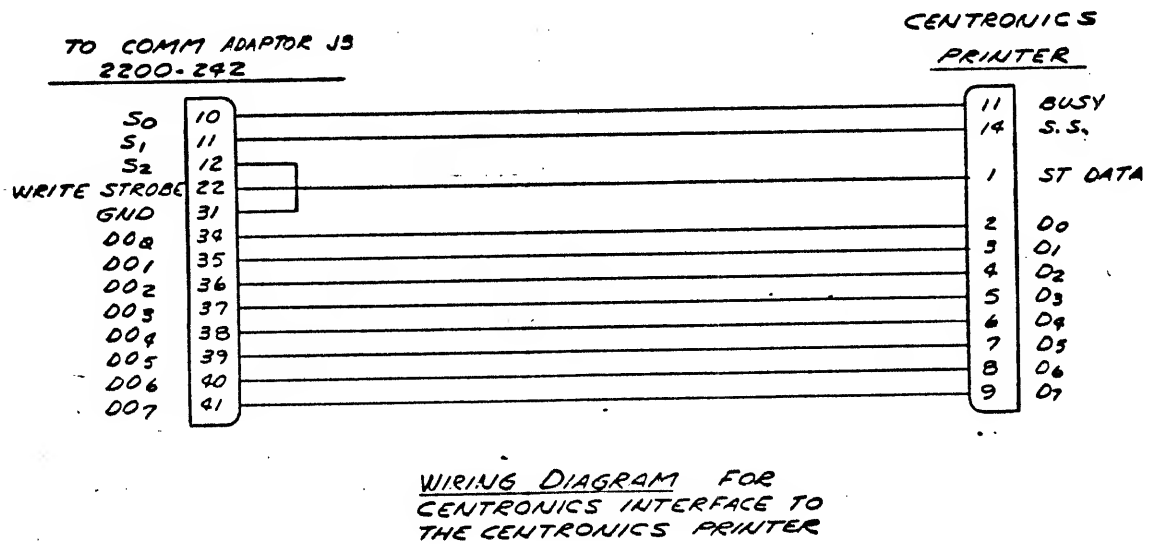


Figure 1: 2200-242 Housing





WIRING DIAGRAM FOR CENTRONICS INTERFACE TO THE CENTRONICS PRINTER

Figure 2: Wiring Diagram

7.0 PARTS LIST

The following separate parts are part of the 2200-242 and are included in each shipment:

Quantity	Description
1	2200-420 Parallel Interface Adaptor (with E.O. 3858 installed)
1	2200-160 Universal I/O Cable
1	2200-243 Centronics Interface Cable
1	Texas Program Cassette
1	Product Specification for 2200-242